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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,381	10/31/2000	Rajeev Dujari	1411	2342

7590 05/12/2005

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EXAMINER	
ALI, MOHAMMAD	
ART UNIT	**PAPER NUMBER**
2167	

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/703,381	DUJARI, RAJEEV	
	Examiner	Art Unit	
	Mohammad Ali	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to the arguments filed on 01/05/2005.

Claims 37-52 are pending in this Office Action. Claims 1-36 and 53-67 have been cancelled.

Response to Arguments

2. After further search and a thorough examination of the present application claims 37-52 remains rejected.

Applicants' arguments with respect to claims 37-52 have been considered, but they are not deemed to be persuasive.

First, Applicants argue that Forecast does not teach, 'generating a plurality of subdirectory names, wherein each subdirectory name is random'.

In response to the applicant's arguments, the Examiner respectfully submits in particular, Forecast teaches this limitation as, Fig. 16 is describes the plurality of subdirectories generation and is shown a schematic allocating server RAM to a popular movie. In FIG. 16, a block of data for a third of a movie is stored in the RAM of each of four stream servers 91, 92, 93, and 94. There is a significant amount of overlap between the video data stored in the RAM of the four stream servers in order to simplify scheduling (see col. 23, lines 42-59 et seq., Forecast).

Second, Applicants argue that Forecast does not teach, 'creating a plurality of randomly-named cached directories, one for each random subdirectory name generated'.

In response to the applicant's arguments, the Examiner respectfully submits in particular, Forecast teaches this limitation as, each node has a list of resources and current allocations of the resources. Associated with each active data stream is a list of pointers to the nodes and current allocations for the data stream. The controller of the file server has programs for automatically creating the dynamic model, modifying the dynamic model in response to component changes such as component failures, enforcing a scheduling and admissions policy by allocating resources for a path for a data stream during a search through the dynamic model in response to a client request for data access, de-allocating resources in response to an end-of-stream condition, and balancing allocations of resources to data streams in order to free resources to allocate a path for a requested data stream. In Figs. 45 and 46, there is shown a block diagram of a particular instance of a video file server 620 including two stream servers 621, 622 in FIG. 45 and a cached disk array 623 in FIG. 46. The first stream server 621 has a first network interface link adapter 624 receiving a first data link 625 from a data network 626 in FIG. 45, and a second network interface link adapter 627 receiving a second data link 628 from the network 626. The first network interface link adapter 624 is supported by a first network interface physical network 625, and the second network interface link adapter 627 is supported by a second network interface physical network 629. The first and second network interface physical networks 625, 629 are linked through a network interface logical sub-network 630 to a cache buffer 631 of the stream server 621. The stream server 621 has two SCSI interfaces 632, 633, linking

the cache buffers 631 to the cached disk array 623 of FIG. 46 (see col. 61, lines 6-23 and Abstract, Forecast).

Third, Applicants argue that Forecast does not teach, 'automatically balancing files among each of the selected directories'.

In response to the applicant's arguments, the Examiner respectfully submits in particular, Forecast teaches this limitation as, allocation balance is used as a background process to keep open paths to datasets. The dynamic model automatically creates to collect information about what components are installed in the file server, the resources of the installed components, and connections between the installed components, see col. 67, lines 41-47, Forecast.

Fourth, Applicants argue that Forecast does not teach, 'balancing files among directories'.

In response to the applicant's arguments, the Examiner respectfully submits in particular, Forecast teaches this limitation as, a server window RAM is assigned to the movie, and a task is initiated to load this server window RAM with duplicate movie data fetched from the cached disk array. If more than one stream server PC has an unallocated window, then one of these stream servers should be selected in an attempt to balance the loading on all of the stream servers (see col. 25, lines 35-40, Forecast).

Fifth, Applicants argue that Forecast teaches away, 'load balancing files'.

In response to the applicant's arguments, the Examiner respectfully submits in particular, Forecast teaches load balancing files not teaches away as stated above.

Sixth, Applicants argue that Forecast does not teach, 'exceeds limit,...'.

In response to the applicant's arguments, the Examiner respectfully submits in particular, Forecast teaches this limitation as, a network client requests backup of a new file or data set, the volume manager allocates disk and tape storage to the new file or data set and updates the catalog, see col. 28, lines 47-59 and col. 44, lines 50-52.

Hence, Applicants' arguments do not distinguish over the claimed invention over the prior art of record.

In light of the foregoing arguments, the 102 rejections are hereby sustained.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 37-52 are rejected under 35 U.S.C. 102(e) as being anticipated by

Forecast et al. ('Forecast' hereinafter), US Patent 6,230,200 B1.

With respect to claim 37,

Forecast discloses a computer-implemented method (see , comprising:

generating a plurality of subdirectory names, wherein each subdirectory name is random (see col. 8, lines 26-30, Forecast);

creating a plurality of randomly-named cache directories, one for each random subdirectory name generated (see col. 67, lines 40-47, Forecast);

storing a plurality of files under the plurality of randomly-named cache directories, each of the plurality of files having a predictable filename (see col. 2, lines 14-16, Forecast); and

automatically balancing the files among each of the plurality of randomly-named cache directories (see col. 67, lines 40-47, Forecast).

As to claim 38,

Forecast teaches receiving information corresponding to a new file to store (see col. 11, lines 47-48, Forecast).

As to claim 39,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes determining which of the directories has a least number of files therein (see col. 5, lines 50-51, Fig. 14, Forecast).

As to claim 40,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes determining when a randomly-named cache directory has a number of files stored therein that exceeds a Limit (see col. 5, lines 50-51, Forecast).

As to claim 41,

Forecast teaches receiving information corresponding to a new file to store, determining that each of the plurality of randomly-named cache directories has a number of files therein that exceeds a limit, and automatically creating at least one new randomly-named cache directory (see col. 20, lines 10-13, Fig. 3, Forecast).

As to claim 42,

Forecast teaches for each file, tracking which of the plurality of randomly-named cache directories that file is stored in (see col. 2, lines 15-17, Forecast).

As to claim 43,

Forecast teaches maintaining a count of a number of files stored in each of the plurality of randomly-named cache directories (see col. 2, lines 15-17, Forecast).

As to claim 44,

Forecast teaches wherein at least one of the plurality of randomly-named cache directories caches content downloaded from a server (see col. 2, lines 15-17, Fig. 6, Forecast).

As to claim 45,

Forecast teaches maintaining a table including sewer content references and filenames covered therefrom (see col. 2, lines 15-17, Fig. 20, Forecast).

As to claim 46,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes determining a randomly-named cache directory having a lowest file count, and moving files from another randomly-named cache directory to the randomly-named cache directory having the lowest file count (see col. 2, lines 15-17 and Abstrat, Forecast).

As to claim 47,

Forecast teaches maintaining an index including a directory name for each of the plurality of randomly-named cache directories, and for each directory name, maintaining a file count of a number of files stored therein (see col. 2, lines 56-60 et seq, Forecast).

As to claim 48,

Forecast teaches comparing the number of files in one of the pluralilty of randomly-named cache directories having the least number of files therein against a predetermined threshold value, and based on the comparison, generating at least one additional randomly-named cache directory (see col. 2, lines 15-17, Fig. 2, and Abstract, Forecast).

As to claim 49,

Forecast teaches maintaining an indexed directory table including data corresponding to each of the plurality of randomly-named cache directories therein, and maintaining a table including file information and corresponding file directory information for each file in one of the plurality of randomly-named cache Directories (see col. 8, lines 10-15, Fig. 3, Forecast).

As to claim 50,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes moving at least one file from one of the plurality of randomly-named cache directories to another of the plurality of randomly-named cache directories following deletion of at least one other file (see col. 8, lines 10-15, Fig. 3, Forecast).

As to claim 51,

Forecast teaches maintaining a file count of a number of files stored in each of the plurality of randomly-named cache directories, and wherein automatically balancing files among each of the plurality of randomly-named cache directories includes moving at least one file out of one of the plurality of randomly-named cache directories when the file count maintained therefor is below' a threshold value (see col. 8, lines 10-15, Fig. 3, Forecast).

As to claim 52,

Forecast teaches removing one of the plurality of randomly-named cache directories based on the file count maintained therefor (see col. 6, lines 30-35, Fig. 1, Forecast).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571) 272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad Ali
Primary Examiner
Art Unit 2167

MA
May 9, 2005